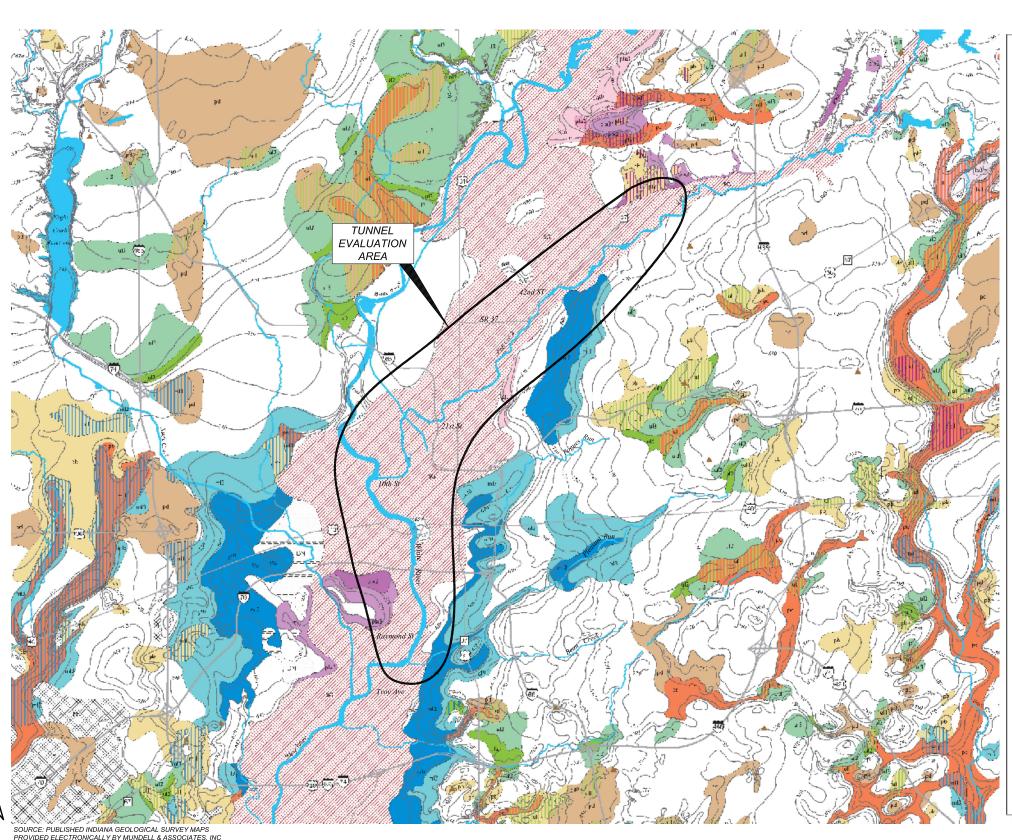
2.3



## Explanation

- Connect shooting approximate alteration of the pre-Wesconsin surface. Connected chiefly on the top of full traffs and other free-gained sodiments of pre-Wesconsin age. Lecully marked by well-derivinged pulseon and for procedural zero of small edge and. More and and growed More and they are affine with of uncertainings and time are not part of the connected action exceeds where they despit represent sodiment pro-Wisconsin notes for sometime, and so if all, pro-wisconsin sodies of the connected actions of the pro-Wisconsin and volkeys can into the pro-Wisconsin sortion. Connect interval 1.0 ft.
- Undifferentiated till and other fine-grained scalenest to at least 20 feet below the contoured surface. May include very small localized granular units in some areas. On cross scoticus the Jos-paritived units are designated by the latters "to."

## Undifferentiated Sand and Gravel

- Wilders, sage, and other low areas on the pre-Wicronain auritace that may contain potentially large said and graved bedies to channel late flores. Said and graved is of illiminia and (et) have wisconsin age. Due netwings quarted in identification channel fill are countily sparse and inequality distributed, honce the around presence or discrete of gravator fill is only indicated in soutcool locations. Reported said and graved histometers are typically 20 floor in more example of the global on bodies and locally exceeds 0 flort in channel over that englesce with deeper said and graved usits.
- Isolated data point reporting thisk body of sand and graved extending denonward into subjected outs from the gire. Whose on nurface. The reported thickness of these features ranges wiskly, from: 20 to more than 160 for.
- ob Shortike sand and gravel bodies generally greater than 10 feet thick.
- Social, mostly discominance leaves of sand and genrel that range between 5 and 15 feet thick. Unit hypodycies are indefinite.

## Pre-Wisconsin Sand and Gravel

- gper" (Hisoian (Lossely defined) sand and gravel units that range from 5 to 23 feet thick.
- Upper' Illinorien units within 5 to 20 2rd of the contoured pre-Wisconsin scripes.
- "Upper" Ulinoian units are orchested by, or within 5 feet of, the contoured pre Wisconsin surface.
- "Upper" Illinoian units are within 20 Sect of the continued give Wisconsin surface and locally coalesce with staniguaphically higher, undifferentiated sand and gamel bodies reapped along the per Wisconsin saffice, or with late Wisconsin sand and gamel order. Coalescod gravular units can be cruck greater than 25 feet thick.

"Middle" Himium (Leondly defined) yand and gravel main that range from less that 10 or more than 50 feet falce. It the north-count part of the county, this tent forms the verthansian against complex, which appears to exponent a relatively continuous buried entwests plain that was gooded down to an ancestral White River during Himium time.

- "Middle" Himman units within 5 to 20 fays of the contoured pro-Wisconsin sysface,
- "Vilidatio". Illinoisan unitstate arparessed by, no within 5 feet of, the consequed pre-Wissonein gardage.
- "Middle" Illinoian seriesae velicio 10 feet el foe contornel pre-Microsos verbee and commonly confece with sessinguishissily hijese, cualiforminate sant to al grant hodies mapped along the pre-Wicrosoft entries, or with the Wiscontin sand and grown traits.

 $Complex \ of coalesced. Him is said and gravel that locally exceeds 80 fee, thick and godes literally into mit.pht.$ 

- 63 Conlessed (Hissian trains within 5 to 20 feet of the construed pre-Wispansin stafface.
- k2 Coalesced Illimitar traits are intoreact by, or within 5 feet of, the construed pie-Wisconsin starface.
- Coalesced Illimation units are within 20 feet of the continued pur-Wisconsin surface and commonly codesce with configurational higher, cold. Distributed and and gase of bodies inapped along the pre-Wisconsin and feet, or with last Wisconsin and feet present control present control.

Pre-Illinoism and "lower" Illinoism and and gravel bodies greater than 20 feet falck. Associated with a promittent green, chert-rich polossol as much as 20 feet thick and may be capped by thin, greenish-gay till. In some phase, the ariti includes abundant, well-operaded, principled, and, instrumed adult mite politics.

- Fer-Illinoism units within 5 to 20 feet of the conformed pre-Wisconsin surface.
  Fer-Illinoism units are transacted by, or within 5 feet of, the commoned pre-Wisconsin surface.
- ph. 2 Pre-Illinoism units are within 20 Decor/fib communical pre-Whomein scales and community codesses with staniguaghtently higher, undifferentiated southened graved bodies support along the per Wisconsin surface, or with late Wisconsin souther, or with late Wisconsin southers and and graved outs.

Complex of Historics seed and gravel tasks that have been instead into per-Historics eard and gravel tasks similar to the one described show note: "plus" One or more polescold may be present and the task status. Inclinesces in retoric of SH first as places. Well-recorded, polest, red, ison-contracted determine pubbles are a common and distinctive constituent.

- Illinoisnight illinoism complex within 5 to 20 feet of the contoured pre Wisconsin surface.
- Illinoisnigre-Illinoisn coreplex truscated by, or within 5 feet of, the corrected pro-Wisconsin nurface.
- Illusions/grt-Illinoism complex within 20 foot of the consoured pre-Wisconsin surface and commonly croticate with sensing optically highes, undifferentiated sand and gravel hodies mapped along the pre-Wisconsin surface, or onto late Wisconsin sand and gravel tanks.

## Other Map Unit

- Large arous tasteriam ensists by Wiscoccin sand and geneel where the pre-Wiscoccin strafface is not generally definable. In those arous one of thrus conditions is typical. It has been of the Wiscoccin section or test or between the wiscoccin cases of the wiscoccin are arrifed as thick section of greatlest enterful and not mattly desamble; or "It a this consert of probable pre-Wiscoccin around a formatic present dissortium code places the behavior as called... In mechanical the pre-Wiscoccin surface has been commend or an least secondy mellified by Wiscoccin analysis and the contract of the probability of the proba
- | DNA | No pre-Wisconsin gluckel arise my present and the base of the Wisconsin north directly on the base Devenium upper Minimissippius New Alberty Shale.
- No pre-Wise crain placial unitance present and the base of fac Wise tenin reats directly on siltatone, shale, and sands one of the Mise is spein.

BROWN AND FLEMING, INDIANA GEOLOGICAL SURVEY, OPEN FILE STUDY 00-14, 2000

GEOLOGY AND TOPOGRAPGHY OF THE PRE-WISCONSIN SURFACE IN MARION COUNTY

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